

# Lecture Week No. 1



<b>Experimental Lectures</b>	Lecture 1: GWs and their effect  <b>Danzmann</b>	Lecture 2: Modulation  <b>Danzmann</b>	Lecture 3: Interferometer and DC readout  <b>Lück</b>	Lecture 4: Fabry-Perot, Pound-Drever-Hall, EOM  <b>Heinzel</b>	Lecture 5: Interferometer noise sources  <b>Lück</b>
<b>General Relativity</b>	Lecture 1: Tensors and Fluids in Special Relativity  <b>Rezzolla</b>	Lecture 2: Curved coordinates, Equivalence principle  <b>Rezzolla</b>	Lecture 3: Tensors and physics in curved spacetime  <b>Rezzolla</b>	Lecture 4: Einstein equations, initial value formulation  <b>Rezzolla</b>	Lecture 5: Linearized gravitational waves  <b>Rezzolla</b>
<b>Numerical Relativity</b>	Lecture 1: Discrete differential operators  <b>Manca</b>	Lecture 2: 3+1 split of spacetime  <b>Manca</b>	Lecture 3: Different formulations of Einstein equations  <b>Manca</b>	Lecture 4: Gauges, initial data and GW extraction  <b>Manca</b>	Lecture 5: Introduction to relativistic hydro-dynamics  <b>Manca</b>